

REVIEW ARTICLE

**The Intersection of Islam and Nursing: A New Perspective on Cleanliness and Care.**

**Mohamad Firdaus Mohamad Ismail\*, Siti Zuhaidah Shahadan**

*Kulliyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia.*

**Corresponding Author**

Mohamad Firdaus Mohamad Ismail

Kulliyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia.

Email: [firdausismail@iium.edu.my](mailto:firdausismail@iium.edu.my)

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**Abstract**

**Introduction:** Cleanliness is a key pillar of health, vital for infection prevention, patient safety, and overall well-being. In both nursing and Islamic teachings, cleanliness is essential to health and ethical responsibility. Nursing focuses on clinical hygiene and sanitation, while Islamic jurisprudence (Fiqh) provides a broader framework encompassing physical, spiritual, and moral dimensions. This study explores cleanliness from both perspectives, identifying similarities and potential integration into nursing practice. **Objective:** This article examines cleanliness in nursing and Islamic teachings, highlighting similarities and differences. It also discusses integrating Islamic principles of cleanliness into nursing to enhance culturally and religiously competent care. **Methodology:** A qualitative content analysis approach was used, drawing from nursing literature and Islamic sources, including the Qur'an, Hadith, and scholarly interpretations. Hygiene frameworks and infection control guidelines were analysed alongside Islamic purification concepts to develop an integrated understanding. **Results:** Both nursing and Islamic teachings emphasise cleanliness for disease prevention and patient care. Nursing focuses on hygiene protocols and infection control, while Islamic jurisprudence extends cleanliness to ritual purity, spiritual well-being, and ethical conduct. Integrating Islamic principles can enhance patient-centred care, address Muslim patients' religious needs, and foster ethical cleanliness in healthcare settings. **Conclusion:** Integrating Islamic cleanliness principles into nursing bridges clinical hygiene with spiritual and ethical care. This integration can improve cultural sensitivity, patient satisfaction, and holistic well-being. Future research should assess its impact on nursing education, healthcare policy, and patient outcomes to promote inclusive healthcare practices.

**Keywords:** *Cleanliness, clinical practice, hygiene, Islamic jurisprudence, nursing, spiritual well-being.*

## Introduction

Cleanliness is fundamental to healthcare, ensuring patient safety, infection prevention, and overall well-being. Nursing, a profession rooted in care and hygiene, emphasises strict adherence to cleanliness protocols to minimise healthcare-associated infections (HAIs) and enhance patient recovery outcomes. Florence Nightingale revolutionised nursing practice by advocating for sanitation, hygiene, and infection control measures, which remain core components of modern nursing education and practice [1]. Similarly, Islam places significant emphasis on cleanliness, viewing it as both a physical necessity and a spiritual obligation. Islamic jurisprudence (Fiqh) categorises cleanliness into physical purification (tahārah) and ritual purification, integrating hygiene with religious obligations [2]. While nursing primarily focuses on clinical hygiene, disinfection, and sterilisation, Islamic teachings expand the concept of cleanliness to include ethical, spiritual, and environmental dimensions. However, despite these shared values, integrating Islamic cleanliness principles into modern nursing remains underexplored.

A major challenge in contemporary nursing practice is addressing the religious and cultural needs of diverse patient populations. This is particularly relevant in Muslim-majority settings, where cleanliness holds both medical and spiritual significance. Studies indicate that inadequate cultural competence in nursing can lead to patient dissatisfaction and barriers to effective healthcare delivery [3,4]. While nursing institutions implement infection control measures based on scientific evidence, there is a gap in integrating Islamic perspectives on cleanliness, which could enhance culturally competent care. Islamic guidelines provide detailed rulings on bodily hygiene, environmental cleanliness, and purification methods, influencing Muslim patients' expectations regarding healthcare practices [5,6]. Despite the alignment between Islamic and nursing perspectives on hygiene, healthcare settings often lack structured policies

to accommodate religious cleanliness practices, potentially affecting Muslim patients' comfort and adherence to medical advice.

This article explores cleanliness from both nursing and Islamic perspectives, identifying areas of convergence and potential integration within clinical practice. This study aims to bridge the gap between medical and religious cleanliness principles to foster culturally sensitive and ethically sound nursing care by comparing nursing hygiene standards with Islamic jurisprudence. The discussion highlights the implications of incorporating Islamic cleanliness concepts in patient care, nursing education, and hospital policies to support holistic and patient-centered healthcare. Future research should focus on evaluating the impact of such integration on patient satisfaction, nurse-patient communication, and overall healthcare outcomes in Muslim-majority and multicultural settings.

## Materials and Methods

This study employs a qualitative content analysis approach to examine the concept of cleanliness from both nursing and Islamic perspectives. The analysis involves an extensive review of contemporary nursing literature on hygiene, infection control, and environmental cleanliness, alongside Islamic jurisprudential sources, including the Qur'an, Hadith, and scholarly interpretations related to purification (*tahārah*). A comparative framework was applied to identify thematic intersections between the two perspectives, allowing a deeper understanding of how Islamic cleanliness principles align with modern nursing standards. This method ensures a comprehensive cleanliness analysis as both a clinical requirement and a spiritual obligation in healthcare settings.

Data collection was conducted through a systematic search of academic literature on nursing-related studies from databases such as PubMed, Scopus, and Google Scholar. Islamic

perspectives were sourced from classical and contemporary Islamic texts, fatwa compilations, and scholarly articles on Islamic jurisprudence. Search terms included “nursing hygiene,” “infection control in healthcare,” “Islamic cleanliness principles,” “Islamic jurisprudence on hygiene,” and “spiritual aspects of cleanliness in healthcare.” Boolean operators (AND, OR) were applied to refine search results. The inclusion criteria comprised peer-reviewed articles, authoritative Islamic sources, and studies published in English focusing on cleanliness in both nursing and Islam. Articles unrelated to healthcare or Islamic jurisprudence, non-peer-reviewed sources, and those without full-text accessibility were excluded from the review.

Following the identification of relevant sources, a manual thematic analysis was conducted to categorise the findings into key domains such as nursing hygiene standards, infection prevention measures, Islamic purification practices, and their application in clinical settings. The data were systematically coded by hand, with researchers independently identifying and labelling recurring concepts and patterns across the selected texts. To ensure trustworthiness and credibility, each researcher first performed individual coding, followed by a consensus-building process in which interpretations were compared, discussed, and refined collectively. Discrepancies in coding or theme categorisation were resolved through deliberation until a shared understanding was reached. This iterative approach helped to reduce researcher bias, enhance analytical rigor, and ensure that the resulting themes accurately reflected both the nursing literature and Islamic jurisprudential perspectives. This approach strengthened the validity of the findings and minimised researcher bias in analysing scientific and religious perspectives [7].

However, as with any qualitative content analysis, this study acknowledges certain limitations. Despite efforts to enhance rigour, the risk of researcher interpretation bias remains due to the

subjective nature of thematic categorisation. Additionally, while multiple reviewers were involved in the analysis process, the scope of source selection may have been constrained by language, availability, and relevance filters. These limitations necessitate cautious interpretation of the findings and encourage further empirical validation and cross-disciplinary exploration in future research.

## Results

The analysis revealed significant overlaps between nursing hygiene principles and Islamic cleanliness (ṭahārah) guidelines, demonstrating that both emphasise the importance of cleanliness for infection control, patient safety, and overall well-being. In nursing, hygiene protocols are guided by evidence-based infection control measures, including hand hygiene, environmental sanitation, and sterilisation of medical instruments. Similarly, Islam mandates ritual purification practices, such as ablution (wudhu’), full-body purification (ghusl), and the removal of impurities (najasah), all of which contribute to personal and environmental hygiene. Integrating these principles in clinical practice can enhance culturally sensitive patient care, particularly in Muslim-majority healthcare settings.

The findings also highlight that nursing education and clinical training focus primarily on physical cleanliness and infection prevention, whereas Islamic teachings extend the concept to encompass spiritual and ethical dimensions. Islam not only emphasises bodily cleanliness but also promotes an ethical approach to hygiene, such as avoiding contamination, maintaining personal modesty, and ensuring cleanliness in food preparation and consumption. This suggests that incorporating Islamic cleanliness principles into nursing curricula could provide a more holistic understanding of hygiene that aligns with medical and religious imperatives.

From a clinical application perspective, the study identified key areas where Islamic cleanliness guidelines can complement nursing hygiene protocols. For instance, Muslim patients may require access to ablution facilities in hospitals, prefer ritual purification before prayer, and seek medical care that respects Islamic rulings on impurity and cleanliness. Nurses with knowledge of Islamic purification practices can facilitate better patient experiences by ensuring culturally appropriate hygiene accommodations, such as providing clean water for ablution, understanding patient preferences regarding contact with impure substances (e.g., blood, urine), and guiding them on maintaining ritual purity during hospitalisation.

Lastly, the findings suggest that a structured integration of Islamic cleanliness principles into nursing policies can enhance culturally competent care and patient satisfaction. Hospitals and healthcare institutions that accommodate religious cleanliness needs may improve patient trust and compliance with treatment. Additionally, healthcare providers who understand Islamic cleanliness laws can help address common patient misconceptions, reinforcing medical and religious well-being. Future studies should assess the practical outcomes of such integration, including its impact on patient care quality, nurse-patient relationships, and institutional policies on hygiene standards in diverse healthcare settings.

The figure 1 presents the assumed relevance of various aspects of Islamic cleanliness principles in nursing practice, as derived from the authors' qualitative thematic analysis. The percentages are not based on quantitative measurements but reflect conceptual weighting and perceived alignment identified through interpretive analysis of the reviewed literature and Islamic jurisprudential sources. They are intended to visualise thematic prominence and integration potential within clinical nursing practice. The percentages reflect the conceptual alignment between nursing hygiene protocols, Islamic cleanliness guidelines, ethical dimensions,

clinical applications, and healthcare integration, highlighting areas where religious and professional hygiene standards can complement each other.

## Discussion

### *Alignment of nursing hygiene and Islamic cleanliness*

Cleanliness is a fundamental component of modern nursing practice and Islamic teachings, emphasizing its role in preventing infections, maintaining health, and ensuring patient well-being. Florence Nightingale's advocacy for sanitation, hand hygiene, and environmental cleanliness has shaped contemporary nursing protocols, reinforcing the importance of maintaining high hygiene standards in healthcare settings [1,8]. Similarly, Islamic teachings mandate ritual purification (ṭahārah) as an essential aspect of daily life, integrating bodily cleanliness with spiritual well-being. The Qur'an and Hadith explicitly outline guidelines on personal hygiene, environmental sanitation, and removing impurities (najasah), ensuring that cleanliness is maintained at all times [2,9]. This demonstrates that nursing and Islamic principles share common objectives in promoting health, safety, and disease prevention, although the latter extends beyond physical cleanliness to incorporate ethical and spiritual dimensions.

Despite these similarities, nursing hygiene primarily focuses on scientific evidence-based infection control measures, while Islamic cleanliness guidelines incorporate religious obligations into daily hygiene routines. For instance, the five daily prayers in Islam require ablution (wudhu'), ensuring that a person maintains cleanliness multiple times daily as Allah mentioned in chapter 5 verse 6 of the Qur'an, "*O you who believe! When you stand up for the prayer, then wash your face and your hands till the elbows, wipe your head and your feet till the ankles. But if you are (in) a state of ceremonial impurity then purify yourselves.*"

Islam also mandates specific purification methods for different impurities, such as washing with mutlaq (pure) water when removing blood or excrement [2]. In nursing practice, hand hygiene, sterilisation, and surface disinfection are strictly regulated to prevent the spread of infections in clinical settings. However, Islamic teachings reinforce not just the act of cleaning itself but also the intention (niyyah) behind it, reflecting an ethical obligation that aligns with the principles of holistic and patient-centered nursing care [6,11]. Understanding these shared values can help nurses provide culturally appropriate care, particularly for Muslim patients who seek medical treatment in compliance with their religious beliefs.

Integrating Islamic cleanliness principles into nursing practice can enhance culturally competent and patient-centered care, particularly in Muslim-majority settings. Hospitals can accommodate religious hygiene practices by providing access to ablution facilities, ensuring the availability of clean water, and respecting patients' need for purification rituals. Additionally, nurses who understand Islamic purification laws can offer better guidance to Muslim patients, particularly when handling situations such as urinary incontinence, menstruation, and post-surgical cleanliness [12,13]. By acknowledging the religious significance of hygiene alongside scientific infection control measures, healthcare professionals can bridge the gap between clinical protocols and patients' spiritual needs, fostering trust, compliance, and improved healthcare outcomes.

#### *Education and ethical aspects of cleanliness*

Education plays a critical role in shaping nurses' understanding of hygiene, and integrating ethical considerations enhances their ability to provide holistic and culturally competent care. In nursing curricula, infection prevention, hygiene protocols, and patient safety are fundamental competencies, ensuring that nurses uphold professional

standards in clinical practice [14]. However, ethical dimensions of cleanliness are often overlooked, despite their significance in nursing professionalism and patient-centered care. Islam extends the concept of cleanliness beyond physical hygiene, linking it to moral conduct, spiritual purification, and ethical responsibility [10,13]. Islamic teachings emphasise that cleanliness is not merely an act but a moral obligation (farḍ) and a sign of faith (īmān), as reflected in the hadith: "*Cleanliness is part of faith*" (Muslim, 223) [15]. By incorporating Islamic cleanliness ethics into nursing education, healthcare professionals can develop a broader perspective on hygiene, recognising its spiritual and ethical implications and medical necessity.

Nursing ethics emphasise duty of care, respect for patient autonomy, and cultural sensitivity, yet there remains a gap in interactions and overall patient satisfaction [16]. For instance, some Muslim patients may decline medical interventions due to concerns about impurity (najasah), requiring nurses to navigate these situations with both clinical expertise and religious awareness. Highly purified insulin is commonly used to treat diabetic patients, but it can raise concerns among some Muslim patients due to its potential origin from impurities (mughallāzah). Nurses may feel guilty or uncertain about administering it. However, since some patients depend on insulin to stay healthy, avoiding it could harm their health. The Fatwa Committee of the National Council for Islamic Religious Affairs Malaysia ruled on 10 October 1983 that using such insulin is permissible in medical emergencies. If synthetic insulin, made from human DNA and E. coli bacteria without pork, is available, nurses should consult the doctor to prescribe it instead [17].

Islamic teachings guide ethical cleanliness practices, such as covering the body appropriately, ensuring purity in food and drink, and maintaining a hygienic environment. These principles align with nursing professionalism,

infection control, and holistic patient care, reinforcing the need for cultural competence training in nursing education. Nurses can enhance their ethical reasoning, improve patient rapport, and provide more inclusive care by integrating religious perspectives on cleanliness into nursing curricula.

The inclusion of Islamic cleanliness principles in nursing education can bridge the gap between professional ethics and religious obligations, promoting a more comprehensive understanding of hygiene in healthcare. Training programs with religious sensitivity modules can prepare nurses to handle situations where Islamic cleanliness laws influence patient preferences, such as menstruation, postpartum care, and ablution requirements before prayer [18,19]. Additionally, structured education on cross-cultural hygiene ethics can equip nurses with the skills to accommodate diverse patient needs while adhering to clinical safety standards. Future research should examine how enhancing nursing curricula with religious and ethical hygiene education impacts nurse-patient relationships, healthcare accessibility, and adherence to treatment plans among Muslim patients. Strengthening ethical literacy in nursing hygiene will ensure that cleanliness is upheld as a medical practice and a moral and culturally respectful commitment to patient well-being.

#### *Clinical applications in nursing care*

Cleanliness is a crucial component of nursing care, directly influencing infection prevention, patient safety, and overall healthcare quality. In clinical settings, nurses are responsible for maintaining hygiene standards, including hand hygiene, environmental sanitation, sterilisation of medical instruments, and personal protective measures to prevent hospital-acquired infections (HAIs) [20]. These practices align with Islamic cleanliness principles, emphasising bodily purity, environmental hygiene, and the ethical responsibility of ensuring cleanliness in all aspects of life. For instance, Islamic teachings

prescribe specific purification methods (tahārah) for removing impurities, including mutlaq water for cleansing body fluids such as blood and excrement [21]. By understanding these religious hygiene principles, nurses can offer more culturally appropriate care, ensuring that Muslim patients' needs are respected while maintaining clinical safety protocols.

One significant clinical application of Islamic cleanliness principles in nursing is assisting Muslim patients with ritual purification (wudhu' and ghusl). Many hospitalised patients may face challenges maintaining their religious hygiene due to mobility restrictions, medical devices (e.g., IV lines, catheters), or post-surgical conditions [22]. Nurses aware of Islamic guidelines on ablution and dry purification (tayammum) can provide practical support by facilitating partial ablution when full wudhu' is impossible or guiding patients in performing tayammum when water use is restricted. Additionally, nurses can ensure that patients have access to clean water, maintain privacy for purification rituals, and accommodate religious concerns regarding bodily cleanliness. These small but significant adjustments can enhance patient comfort, dignity, and spiritual well-being, leading to greater compliance with medical treatments and improved patient satisfaction.

Another critical aspect of clinical application is handling patient hygiene needs in a way that aligns with Islamic jurisprudence. In certain situations, nurses may need to cleanse patients who cannot do so themselves, such as assisting with perineal care, postpartum hygiene, or managing incontinence. Islamic teachings emphasise the removal of najasah (impurity) using proper cleansing methods, which require flowing water rather than just wipes or dry cleaning methods [23]. By adhering to these principles, nurses can ensure patients feel reassured about their ritual purity while maintaining high infection control standards. Furthermore, nurses can educate patients on

balancing Islamic cleanliness obligations with medical care, such as advising on religious exemptions in cases of medical necessity (e.g., when delaying purification due to severe illness is permitted in Islam). Integrating Islamic cleanliness principles into nursing practice guidelines can help create an inclusive healthcare environment where religious sensitivities are acknowledged without compromising medical standards.

#### *Impact on healthcare practice*

Integrating Islamic cleanliness principles into nursing practice and healthcare policies can enhance patient-centered care, improve cultural competence, and strengthen infection control measures. In healthcare settings, hygiene protocols are designed to prevent infections and ensure patient safety, but they often overlook religious considerations, particularly for Muslim patients who adhere to specific cleanliness rituals [24]. Accommodating Islamic cleanliness practices, such as providing access to ablution facilities, ensuring privacy for purification rituals, and respecting religious views on bodily purity, can significantly enhance patient comfort and satisfaction. Research has shown that culturally competent care leads to better health outcomes, increased patient trust, and improved adherence to medical recommendations [25,26]. By incorporating Islamic cleanliness guidelines into hospital policies and nursing protocols, healthcare institutions can create a more inclusive and respectful environment for Muslim patients, reducing anxiety and improving the overall care experience.

Beyond individual patient care, integrating Islamic cleanliness principles can also benefit healthcare workers and institutions by enhancing infection control measures and reinforcing ethical hygiene standards. Islamic teachings emphasise that cleanliness is a personal and social responsibility, encouraging healthcare workers to maintain high hygiene standards in their professional and personal lives [27]. For example,

the Islamic practice of regular handwashing before prayer (wudhu') aligns with evidence-based hand hygiene protocols recommended for infection prevention in hospitals. Additionally, the emphasis on environmental cleanliness in Islam, such as keeping hospital wards free from contamination and ensuring proper waste disposal, complements modern hospital sanitation guidelines. Healthcare facilities that recognise and support these religious hygiene principles may see improvements in workplace cleanliness culture, leading to lower infection rates and higher compliance with hygiene protocols among healthcare staff.

Implementing structured policies that incorporate religious cleanliness considerations requires collaboration between healthcare administrators, Islamic scholars, and medical professionals to ensure that these accommodations align with both medical best practices and religious guidelines. Hospitals can develop standardized training programs for nurses and other healthcare providers, equipping them with knowledge on Islamic hygiene laws and culturally competent care strategies [27]. Such initiatives not only benefit Muslim patients but also contribute to a broader movement toward patient-centered and culturally responsive healthcare delivery.

Despite the promising benefits of integrating Islamic cleanliness principles into nursing care, several practical challenges and potential resistance may arise in real-world implementation. One major barrier is the lack of awareness or understanding among non-Muslim healthcare providers regarding Islamic hygiene requirements, which could lead to unintentional disregard or misinterpretation of religious needs. Additionally, institutional constraints, such as rigid hygiene protocols, time limitations, or resource availability (e.g., access to clean water or private spaces for ablution), may impede efforts to accommodate religious practices. Furthermore, some healthcare professionals may perceive the integration of religious principles as conflicting

with secular or evidence-based clinical environments, raising concerns about the balance between religious accommodations and standardised medical care.

To address these challenges, interdisciplinary collaboration is essential—bringing together healthcare administrators, Islamic scholars, and nursing educators to create context-specific guidelines that align religious principles with medical protocols. Incorporating cultural competence training into nursing curricula and continuous professional development can build empathy, awareness, and practical skills among healthcare workers. Institutions can also develop flexible policies that support reasonable accommodations without compromising safety or care quality. By fostering open dialogue, providing targeted education, and embedding inclusive practices within healthcare systems, potential resistance can be reduced, and the integration of Islamic cleanliness principles can become both feasible and sustainable in diverse clinical settings.

## **Conclusion**

Integrating Islamic cleanliness principles into nursing practice provides a comprehensive approach to hygiene that aligns scientific infection control measures with religious and ethical obligations. This study has demonstrated that nursing and Islamic teachings emphasise cleanliness as essential for disease prevention, patient care, and ethical healthcare practice. By incorporating Islamic cleanliness guidelines into nursing education, clinical applications, and

hospital policies, healthcare professionals can enhance culturally competent care, improve patient satisfaction, and reinforce ethical hygiene standards. The findings suggest that nurses' understanding of Islamic purification laws can better accommodate Muslim patients' needs, leading to greater trust, improved compliance with medical treatments, and better healthcare outcomes. Future research should explore the long-term effects of integrating religious hygiene principles into nursing curricula and hospital policies, ensuring that healthcare environments remain inclusive, ethical, and patient-centered while upholding the highest medical hygiene standards.

## **Conflict of interest**

The authors have no conflict of interest in this study.

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## **Authors' contributions**

MFMI conceptualised the study, conducted the Islamic jurisprudential analysis, and led the manuscript writing. SZS performed the nursing literature review, contributed to the thematic analysis, and assisted in drafting and revising the manuscript. Both the authors reviewed and approved the final version of the manuscript.

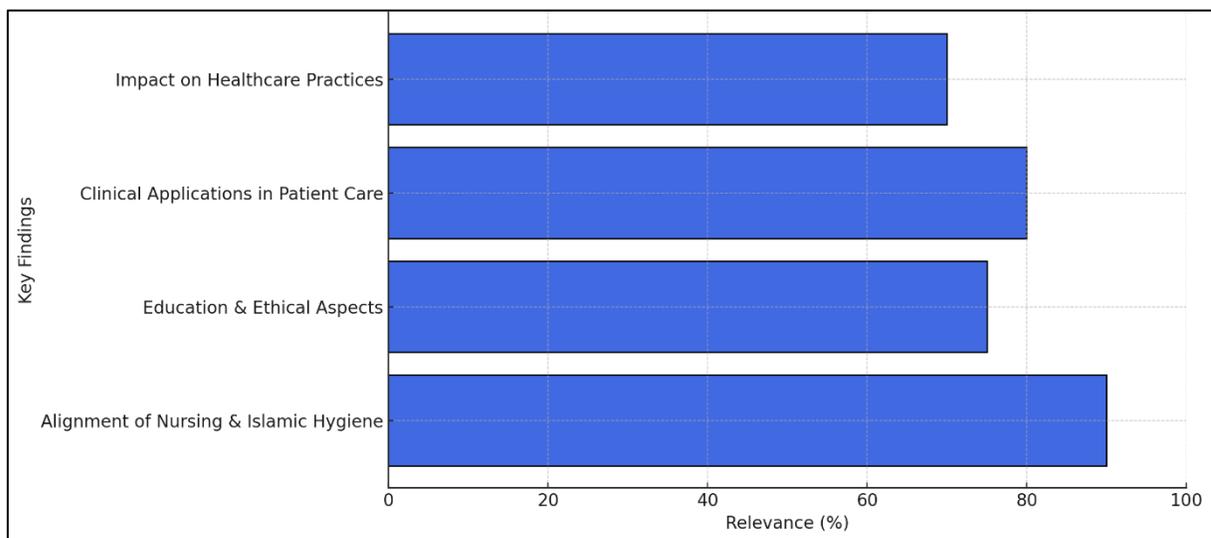


Figure 1. Conceptual Alignment of Islamic Cleanliness Principles with Nursing Practice

## References

- [1]. Broodkoorn M. Nursing the world to health. Kai Tiaki: Nursing New Zealand. 2020;26(3):2.
- [2]. Office of the Regional Mufti. Irsyad al-Fatwa Series 416: How to clean urine on a thick and heavy mattress. Mufti WP [Internet]. 2020 [cited 2025 Mar 13]. Available from: <https://muftiwp.gov.my/artikel/irsyad-fatwa/irsyad-fatwa-umum/4167-irsyad-al-fatwa-sirike-416-cara-membersihkan-air-kencing-di-atas-tilam-tebal-dan-berat>
- [3]. Harkess L, Kaddoura M. Culture and cultural competence in nursing education and practice: The state of the art. *Nursing Forum*. 2015;50(4):255-67.
- [4]. Ghasemi S, Shariatpanahi S, Dabaghi S, Sarbakhsh P. The effects of an educational intervention based on the Campinha-Bacote model on cultural competence of undergraduate nursing students. *BMC Nurs*. 2025;24(1):228. <https://doi.org/10.1186/s12912-025-02876-6>.
- [5]. National Health Service (NHS). National Standards of Healthcare Cleanliness 2021 [Internet]. 2021 [cited 2025 Mar 13]. Available from: <https://www.england.nhs.uk/publication/national-standards-of-healthcare-cleanliness-2021/>
- [6]. Mahmood MA, Mohd Yusof N, Saidi S, Che Ahmad A. The Integration of Islamic Values in Daily Clinical Practice among Healthcare Professionals: A Scoping Review. *IIUM Medical Journal Malaysia*. 2023;22(3). <https://doi.org/10.31436/imjm.v22i3.2273>.
- [7]. Baldwin JR, Pingault JB, Schoeler T, Sallis HM, Munafò MR. Protecting against researcher bias in secondary data analysis: challenges and potential solutions. *Eur J Epidemiol*. 2022;37(1):1-10.
- [8]. Smith T, Brown J. Florence Nightingale's Environmental Theory and its application in contemporary 21st century nursing practice. *Aust J Nurs Midwifery*. 2020;23(2):10-15.
- [9]. Al-Zoubi M, El-Amad W, Sultan N, Shihadeh K, Ameen Ghalia M, Rbeihat R, Abu Arqoub H, Btoush A, Rababeh F, Zoubi A, Ababneh H. Sanitation for Millions - WASH in Islam: Guide on Water, Sanitation and Hygiene (WASH) from an Islamic Perspective. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Sanitation for Millions Jordan. 2020

- [10]. Al-Hassan A, Al-Shahri M, Al-Harbi A. The Integration of Islamic Values in Daily Clinical Practice. *IMJM*. 2023;22(3):36.
- [11]. Ardian I, Nursalam N, Ahsan A, Haiya NN, Azizah IR. The development of an islamic nursing care model to improve patient satisfaction. *Jurnal Ners*. 2024;19(1):3-12.
- [12]. Sange C, Thomas L, Lyons C, Hill S. Urinary incontinence in Muslim women. *Nursing Times*. 2008;104(25):49-52
- [13]. Rassool GH. The crescent and Islam: healing, nursing and the spiritual dimension. *J Adv Nurs*. 2000;32(6):1476-84
- [14]. Carrico R, Garrett A. Infection Prevention and Control Core Practices: A Roadmap for Nursing Practice. *Am J Infect Control*. 2018;46(8):883-888
- [15]. Sahih Muslim. Hadith 223: Cleanliness is part of faith. [Internet]. Available from: <https://sunnah.com/search?q=+Hadith+223>
- [16]. Alpers LM, Hanssen I. Hospital food: When nurses' and ethnic minority patients' understanding of Islamic dietary needs differ. *Nurs Open*. 2019;6(4):1455-1463.
- [17]. Wan Ismail WNES, Mahamad Maifiah MH. Porcine and bovine-derived ingredients: Islamic rules in halal pharmaceutical products. *J Fatwa Manag Res*. 2023;28(3):42-57. DOI: 10.33102/jfatwa.vol.28no3.549.
- [18]. Farokhzadian J, Tirgari B. Empowerment of nurses for integrating clients' religion/spirituality into clinical practice: an online training program. *BMC Nurs*. 2021;20:210
- [19]. Rassool GH. Cultural competence in nursing Muslim patients. *Nurs Times*. 2015;111(14):12-15
- [20]. Garvey M. Medical Device-Associated Healthcare Infections: Sterilization and the Potential of Novel Biological Approaches to Ensure Patient Safety [Internet]. *Int J Mol Sci*. 2024;25(1):201.
- [21]. Al-Shadiq A. Water Treatment and Purification in Fiqh [Internet]. USIM Repository; 2024 May 29. Available from: <https://oarep.usim.edu.my/bitstreams/4d647fa4-af40-4beb-b7a1-9b867227a303/download>
- [22]. Mason M, Wakefield J, Sparke V, Basseal JM, Zimmerman P-A. Religious influences on infection prevention and control practices in healthcare settings: A scoping review. *Infect Dis Health*. 2025 Mar 12; [In Press, Corrected Proof]. Available from: <https://doi.org/10.1016/j.idh.2025.02.004>.
- [23]. Noordin MF. The ruling of using baby wipes. Mufti of Federal Territory's Office [Internet]. 2019 Sep 6 [cited 2025 Mar 14]; Available from: <https://muftiwp.gov.my/en/artikel/al-kafi-li-al-fatawi/3677-al-kafi-1364-hukum-menggunakan-wipe-baby-ketika-membersihkan-najis-bayi>.
- [24]. Blenkarn JJ. Rigid infection prevention and control rules and religious discrimination: An uncomfortable juxtaposition? *J Infect Prev*. 2020;21(1):35-39. doi: 10.1177/1757177419884690.
- [25]. Handtke O, Schilgen B, Mößko M. Culturally competent healthcare – A scoping review of strategies implemented in healthcare organizations and a model of culturally competent healthcare provision. *PLoS One*. 2019;14(7):e0219971. doi: 10.1371/journal.pone.0219971.
- [26]. Lauwers EDL, Vandecasteele R, McMahon M, De Maesschalck S, Willems S. The patient perspective on diversity-sensitive care: a systematic review. *Int J Equity Health*. 2024;23(117). doi: 10.1186/s12939-024-02189-1.
- [27]. Irfan B, Khleif A, Badarneh J, Abutaqa J, Allam A, Kweis S, et al. Considering Islamic frameworks to infectious disease prevention. *Open Forum Infect Dis*. 2025;12(1):ofaf011.